

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
AIR AND RADIATION

February 15, 2013

Dear Imaging Equipment Partner or Other Interested Stakeholder:

In response to the Final Draft ENERGY STAR Version 2.0 Imaging Equipment specification, EPA received some input on our approach to Digital Front Ends (DFEs) associated with imaging equipment that has prompted us to refine the scope and requirements. EPA also received some additional data reflecting energy use of A3 paper width models that have resulted in a minor modification to the proposed A3 adder. Prior to finalizing the specification, EPA is seeking stakeholder input on these two points further discussed in this document.

DFEs: Scope

In the Final Draft, EPA proposed excluding products sold with multiple DFEs. In written comments and during the web discussion, stakeholders noted that many more products than EPA previously understood are sold with both a Type 1 and a Type 2 DFE. Based on this additional information, EPA is proposing removing this exclusion. Any DFE sold with an ENERGY STAR certified imaging product would need to meet the appropriate maximum TEC_{DFE} requirement for Type 1 or Type 2 DFEs.

Excluded Scope. As proposed would remove subbullet ii. as reflected below:

2.2.2 *Products that satisfy one or more of the following conditions are not eligible for ENERGY STAR qualification under this specification:*

- i. *Products that are designed to operate directly on three-phase power.*
- ii. ~~*Products sold with multiple DFEs.*~~

DFEs: Product Family Definition

During the stakeholder discussion and in written comments, EPA received input that testing and qualifying each permutation of a DFE with a base marking engine would be overly burdensome. In general, EPA's product family definition allows for an acceptable variation within a family. EPA is proposing a family approach for DFEs.

Product Family. As proposed would add specific mention of DFEs subpart d), as reflected in **bold** below:

Product Family: A group of product models that are (1) made by the same manufacturer, (2) subject to the same ENERGY STAR qualification criteria, and (3) of a common basic design. Product models within a family differ from each other according to one or more characteristics or features that either (1) have no impact on product performance with regard to ENERGY STAR qualification criteria, or (2) are specified herein as acceptable variations within a product family. For Imaging Equipment, acceptable variations within a product family include:

- a) *Color,*
- b) *Housing,*
- c) *Input or output paper-handling accessories,*

*d) Electronic components not associated with the marking engine of the Imaging Equipment product, **including Type 1 and Type 2 DFEs.***

DFEs: Representative Model

For all products certified using the product family provision, the representative model of the product family is defined as the highest energy using configuration within the family. EPA would like to be clear that this requirement would apply to the DFE and imaging product combination certified under the product family provision. This approach ensures that an entire product family meets the ENERGY STAR requirements. EPA did receive a request that the representative model be the most common configuration sold, but this approach would not ensure compliance across a full family nor does it align with treatment of product families in other ENERGY STAR product categories.

Representative Model. As proposed, subpart iii. would be added to the representative model language as reflected in **bold** below.

4.2.1 *Representative Models shall be selected for testing per the following requirements:*

- i. For qualification of an individual product model, a product configuration equivalent to that which is intended to be marketed and labeled as ENERGY STAR is considered the Representative Model;*
- ii. For qualification of a product family, the highest energy using configuration within the family shall be considered the Representative Model. When submitting product families, manufacturers continue to be held accountable for any efficiency claims made about their imaging products, including those not tested or for which data was not reported.*
- iii. For qualification of a product family which includes Type 1 DFE, the highest energy using configuration of the imaging product and highest energy using DFE within the family shall be tested for qualification purposes. When submitting a product family with a Type 1 DFE, manufacturers continue to be held accountable for any efficiency claims made about their imaging products and all Type 1 DFEs sold with the imaging product, including those not tested or for which data was not reported. Imaging products that do not incorporate a Type 1 DFE may not be added to this product family for qualification and must be qualified as a separate family without a Type 1 DFE.***

On the qualified product listing, EPA intends to provide the energy usage of other DFEs associated with the family in a separate field. These additional DFEs would not need to be tested with the Imaging equipment and would not be subject to certification but would be subject to possible verification testing. If any of the DFEs sold with the product cannot meet the TEC_{DFE} levels during verification testing, the entire family would be disqualified.

Again, the representative model for testing and certification is the highest energy using configuration (including the highest energy using DFE). Any modification to the representative model, particularly if a higher consuming DFE is incorporated into the product family, would invalidate the original certification, and the new, even higher energy using configuration would need to be re-certified.

A3 Adder

EPA received a several comments that the proposed A3 adder of 0.2 kWh/week was insufficient to elevate the qualification rate for lower speed models sufficiently to provide adequate consumer choice. EPA also received and analyzed additional data reflecting the energy use of these A3 models. In certain speed bands, data indicate that consumer choice might be limited unless a slightly larger adder is provided. In response, EPA is proposing raising the A3 adder to **0.3 kWh/week**.

Submittal of Written Comments

Comments on these changes to the Final Draft Version 2.0 specification should be submitted via email by **March 1, 2013**, to imagingequipment@energystar.gov. All comments received will be posted to the ENERGY STAR Product Development Web site, unless the submitter specifically requests that his or her comments remain confidential. EPA anticipates finalizing the Version 2.0 Imaging Equipment specification in March 2013.

Imaging Equipment Webinar

On February 22, 2013, from 1 PM to 2:30PM, Eastern Time, EPA will host a stakeholder webinar to present details on the above clarifications to the final draft Version 2.0 ENERGY STAR Imaging Equipment. If you wish to attend this meeting, please RSVP to imagingequipment@energystar.gov no later than February 21, 2013.

Thank you for your continued support of ENERGY STAR. Please contact me at (202) 343-9046 or kent.christopher@epa.gov or Matt Malinowski at (202) 862-2693 or matt.malinowski@icfi.com with any questions or comments regarding this specification revision. For questions relating to the test method, please contact Bryan Berringer at (202) 586-0371 or Bryan.Berringer@ee.doe.gov.

Sincerely,

A handwritten signature in black ink that reads "Christopher Kent". The signature is written in a cursive style with a large initial "C".

Christopher Kent,
Product Manager, ENERGY STAR for Imaging Equipment